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ABSTRACT

This policy statement on smoking and health was written by a working group of experts commissioned by the American Heart Association's Subcommittee on Smoking to study relevant issues and recommend appropriate policies for achieving a smoke-free society by the year 2000. To aid in developing and implementing public policies designed to facilitate the transition from a smoking to a nonsmoking society, the report discusses and recommends four policies: (1) increasing the federal cigarette excise tax; (2) eliminating or restricting tobacco advertising and other forms of smoking promotion; (3) assuring the rights of nonsmokers to clean air through legislative means; and (4) identifying mechanisms to ease and assist the transition of tobacco farmers to other crops or careers. Each of these four policy recommendations is discussed in detail and it is noted that each recommendation addresses both the prevention of the initiation of smoking habits and the encouragement of cessation. In addition to these four policies, the report stresses a need for more and better school health education and for continued research on smoking and health; recognizes that other policies are also important; and expresses concern over both the rapid growth of smoking in Third World countries and the growing use and documented hazards of smokeless tobacco. (Author/NB)

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SPECIAL REPORT

Public Policy on Smoking and Health: Toward a Smoke-Free Generation by the Year 2000

A Statement of a Working Group to the Subcommittee on Smoking of the American Heart Association

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ABSTRACT On May 20, 1984, the Surgeon General challenged the health community to work toward attainment of a smoke-free society by the year 2000. The leadership of the nation's three major voluntary organizations joined numerous associations of health professionals in accepting the challenge. The Subcommittee on Smoking of the American Heart Association (AHA) has concluded that attaining this objective requires the development and implementation of public policies designed to facilitate the transition from a smoking to a nonsmoking society. To study the relevant issues and recommend appropriate policies, the subcommittee commissioned a working group of distinguished experts in the field of smoking and health to prepare a policy statement. The statement, published here, has received the enthusiastic endorsement of the Subcommittee on Smoking and the leadership of the AHA.

The working group discusses and recommends four policies:

1. **Increase the federal cigarette excise tax.**
2. **Eliminate or restrict tobacco advertising and other forms of promotion.**
3. **Assure the rights of nonsmokers to clean air through legislative means.**
4. **Identify mechanisms to ease and assist the transition of tobacco farmers to other crops or careers.**

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On May 20, 1984, C. Everett Koop, M.D., Surgeon General of the Public Health Service, announced the goal of achieving a smoke-free society in this country by the year 2000.[1] The leadership of the three major voluntary organizations — the American Heart Association, the American Cancer Society, and the American Lung Association — immediately committed their organizations to work with the Surgeon General to achieve this goal. Numerous other major voluntary and professional health organizations have announced their desire to join in the effort as well.

At its meeting of October 26–27, 1984, the Subcommittee on Smoking of the American Heart Association concluded that attaining the Surgeon General's objective requires the development and implementation of public policies designed to facilitate the transition from a smoking to a nonsmoking society. The need for public policies recognizes the role of the contemporary social and legal environment in encouraging the initiation and maintenance of smoking, and hence the need for social and legal steps to alter this environment to one supportive of a nonsmoking society. This report addresses four major policy initiatives that the subcommittee believes can contribute to a healthier social environment.

Before discussing the four public policies, the working group wishes to emphasize the context and limitations of the report. First, the need for more and better school health education or for continued research on smoking and health is not debated. The subcommittee

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and working group believe these to be essential ingredients in any serious effort to combat the disease toll caused by smoking. The neglect of them here reflects the perception that these are well-established cornerstones of action on smoking and health and will remain so regardless of the development of additional initiatives; the latter are what the AHA Subcommittee on Smoking wishes to emphasize. The salience of education and research is seen in the ongoing work of the AHA in the area of smoking and health, work that receives the regular endorsement and guidance of the subcommittee.

Second, by identifying four major public policy areas, it is not suggested that others are unimportant. Similarly, the focus on public policies means that significant private sector initiatives are ignored in this document. A timely example is the increasing emphasis on private lawsuits brought against the cigarette producers by the victims of smoking-related disease and their families.

Third, the report focuses exclusively on policy initiatives oriented toward reducing the toll of smoking within the United States. A leading tobacco-and-health concern of the next several decades is the rapid growth of smoking in Third World countries. While per capita cigarette consumption is falling in most of the industrialized world, it is rising annually in the world's poorest countries.[2] The incidence of smoking-related diseases is also rising rapidly in these countries. The former director of the Centers for Disease Control, Dr. William H. Foege, has stated that by the turn of the century, smoking will be the leading cause of premature death and preventable illness in the Third World.[3] The spread of the smoking habit to the world's impoverished nations raises a myriad of challenging economic, political, and fundamentally moral issues that we believe deserve attention both at home and in the global community. In this document, however, we discuss only policies oriented toward producing the nonsmoking norm in the United States. Indirectly, success in this endeavor may serve decades hence as a model for other countries to break their national smoking habits. Certainly the affluent countries have served as the Third World's model for developing such habits.

Fourth, although not discussed here, the working group is concerned with the growing use and documented hazards of smokeless tobacco.[4] The tobacco industry is attempting to portray smokeless tobacco as a safe alternative to smoking and is aggressively marketing smokeless tobacco products to youngsters. Some recent surveys have found a higher prevalence of daily use of smokeless tobacco than of cigarettes among school-age boys.[5] Attainment of a smoke-free generation will be a limited victory if smokeless has this connotation, rather than meaning tobacco-free.

Overview of Policy Initiatives

The next four sections explore the four policy areas individually. The policy initiatives are:

1. Increase the federal cigarette excise tax.
2. Eliminate or restrict tobacco advertising and other forms of promotion.
3. Assure the rights of nonsmokers to clean air through legislative means.
4. Identify mechanisms to ease and assist the transition of tobacco farmers to other crops or careers.

Cigarette Excise Tax

The first recommendation calls for increasing the cigarette excise tax. The virtues of this policy, elaborated below, are the following:

- The tax is a demonstrably effective means of discouraging cigarette smoking.
- The tax raises government revenue and therefore reduces rather than exacerbates the government's budget deficit problem.
- The tax can serve as an effective deterrent to the initiation of smoking by children and teenagers. If Americans do not start smoking in their teens, they are very unlikely ever to smoke in large numbers. Thus a tax increase, if sustained in real terms, can lead eventually to substantial reductions in the smoking population.
- The major consumption impact of a tax increase is gradual, permitting tobacco farmers and cigarette manufacturers a long lead period in adjusting to the decline in demand.
- Taxation can be advocated as a device to reduce market failure reflecting smokers' underestimation of the adverse health consequences of smoking or of the addictive nature of tobacco consumption.*

In the past, federal and state government excise taxes on products like tobacco and alcohol were intended to serve either to raise revenues or to discourage the use of the product in question, the latter typically reflecting a concern with the morality of using the product. In recent years, however, legislatures have begun to view excise taxes as useful devices for serving both of these ends simultaneously, though the motivation for discouraging consumption has shifted in large part from concern with the "moral health" of users to their physical health, and sometimes to the economic implications of smoking-related illness. The latter reflects the belief that use of these products generates social costs, in the form of increased medical expenditures and productivity losses, that are borne by the society as a whole.[7-10]

Analyses of the price elasticity of demand for cigarettes lend credence to the notion that excise taxes on cigarettes can serve both of the major objectives. A recent state-of-the-art analysis[11] indicates that the overall adult price elasticity of demand is in the vicinity of −.4, a figure supported in a still-more-recent techni-

*Market failure is a situation in which basic assumptions underlying the efficient working of the marketplace do not hold. In such instances, government interventions may be warranted to improve efficiency. Two assumptions of efficient competition are that consumers are fully informed and that their market decisions are rational. If consumers do not comprehend the hazards of smoking, as the evidence suggests,[6] increasing the price of cigarettes through taxation can move smoking behavior in the direction of what it would be in a world of fully informed consumers.

cal analysis.[12] This means that an increase in the price of cigarettes of ten percent should produce a decrease in the quantity demanded of four percent. Since price rises more rapidly than quantity falls, total sales revenues, and of specific interest, tax revenues, rise. At the same time, however, the existence of some price responsiveness means that the level of smoking decreases. Lewit and Coate's analysis suggests further that a substantial majority of this decrease will result from a decrease in the prevalence of smoking, rather than from decreases in the daily consumption of continuing smokers. Thus the deterrence impact of a tax increase is realized primarily by encouraging smokers to quit and discouraging nonsmokers from initiating the habit.

Examples will help to clarify the implications of a tax change. In the examples, we employ numbers that reflect the situation existing in the United States at the time of this writing (early fall 1985). As that situation is subject to near-term change, it is employed simply to illustrate the implications of a tax change.

In 1985 the retail price of a pack of cigarettes has been about $1. The federal excise tax is 16 cents and has been scheduled to fall back to its 1982 level of 8 cents on October 1, 1985, as mandated in the 1982 Tax Equalization and Fiscal Responsibility Act (TEFRA). Last year, the tax generated close to $4.8 billion in revenues. Aggregate national cigarette consumption is 600 billion cigarettes, consumed by some 54 million smokers. If the tax is permitted to drop to 8 cents, retail price will fall by 8.3 percent to 92 cents per pack.*† With an elasticity of −.47 (Lewit and Coate's estimate of the weighted elasticity for all ages), this suggests that the quantity of cigarettes demanded should increase by 3.9 percent. The increase in the prevalence, or number, of smokers should be just under 3.0 percent.‡

These percentage changes translate into the following numerical implications: if the federal excise tax were to revert to 8 cents as scheduled, the number of cigarettes consumed per year would increase by over 20 billion, or some 100 cigarettes per man, woman, and child. The number of smokers would increase by roughly 1.5 million compared with the number expected in the absence of the tax decrease. Federal excise tax revenues would fall by almost half, to an estimated $2.5 billion, while because of increased cigarette sales, state cigarette tax revenues would increase by approximately $180 million, producing a net excise tax loss of $2.1 billion to all levels of government.§

The TEFRA-legislated drop in the federal excise tax would represent a return to the rate effective since 1951. Basic price inflation in the intervening three-plus decades has eroded the value of the 8-cent base tax to roughly a quarter of what it was in 1951. For the real value of the federal tax rate simply to have been maintained, the current tax rate would have to be 32 cents per pack. Thus, to consider the possible impacts of an increase in the excise tax rate, the effects of doubling the rate from its current 16 cents to 32 cents are estimated. The assumptions remain as before.

A doubling of the tax rate would increase the average retail price from $1.00 to $1.16, representing a price change of 15 percent. The elasticity estimate of −.47 implies that the quantity of cigarettes demanded would fall by 7.1 percent, with a 4.0 percent decrease in the number of smokers relative to the smoking population in the absence of a price change. Numerically, Americans would demand almost 43 billion fewer cigarettes. The number of smokers would fall by 2.2 million or more. Federal excise tax revenues would rise by roughly $4.1 billion, while state excise tax revenues would decline by some $330 million, representing a net excise tax gain to all levels of government of almost $4 billion. The same caveats and qualifications apply as before.

A significant consequence of a tax-generated cigarette price change is its impact on smoking by teenagers and young adults. The works of Lewit, Coate, and Grossman[15] and Lewit and Coate[11] demonstrate empirically an important result that is easily grasped at an intuitive level: children's cigarette consumption is much more sensitive to the price of cigarettes than is the consumption of adults; furthermore, young adults are more price responsive than middle-aged adults. The logic of this finding derives from both an economic and a social behavioral basis: economically, young people have less disposable income and hence would be expected to exhibit greater price elasticity of demand for a wide range of products, including tobacco products; behaviorally, as a group, teens and young adults have less well-established smoking habits than do their seniors and hence again would be expected to be more responsive to price changes.

Lewit and colleagues[15] have estimated teenagers'

*This assumes that other components of price, including state taxes and wholesale cost, are unchanged, and also that a tax decrease is fully passed on to consumers in the form of price decrease.

†Percentage changes use the average of the pretax and posttax change as the denominator.

‡It is possible that price response is not symmetrical, especially in the case of adults. For example, a price decrease might not influence many adults to start smoking, as smoking initiation generally occurs prior to adulthood. By contrast, a price increase could induce many smokers to quit. If this kind of asymmetry holds, our estimates of smoking increases associated with a price decrease might be too large, while estimates of smoking decreases, deriving from price increases, might be too small.[13]

§Again the reader is reminded that this analysis holds all other variables constant. Thus, for example, the increase in the number of smokers is separate from that which would occur due simply to population growth. Regarding the revenue implications, additional tax ramifications outside of those affecting cigarette excise taxes are not examined. Even modest changes such as the ones discussed here would have numerous systemic consequences. As an example, the increasing demand for cigarettes as a result of the price decrease would increase employment in the tobacco industry, thereby generating additional wage-based and income taxes. Similarly, increased levels of smoking would increase smoking-related illness and its associated fiscal demands on the Medicare, Medicaid, and Veterans Administration budgets. The authors are not aware of an attempt to estimate all of the revenue implications of such a price change. It is most unlikely, however, that the indirect consequences noted here would compensate for the direct impact on excise tax revenues. A Treasury Department estimate supports this view, finding that employment-related revenue changes do not come close to equaling the magnitude of the excise tax revenue change.[14]

cigarette price elasticity at −1.4. This means that a ten percent increase (or decrease) in cigarette price would generate a 14 percent decrease (or increase) in quantity of cigarettes demanded. As with adults, the majority of teenage price response appears to be related to the propensity to smoke, rather than the number of cigarettes smoked per day by existing smokers. In teenagers, however, the effect is even stronger than in adults, with a prevalence elasticity estimated at −1.2. That is, the ten percent decrease (or increase) in price would produce a 12 percent increase (or decrease) in the number of teenage smokers.

To put these elasticity figures into perspective, TEFRA's scheduled federal excise tax decrease of 8 cents would be expected to increase the number of teenage smokers by ten percent, or almost 500,000 young people, again assuming that the tax change was fully reflected in a retail price decrease. If Congress chose instead to double the tax to 32 cents (reflecting the same real value of the tax as in 1951), the population of teenagers who smoke would drop by almost 18 percent, or close to 850,000.

The message of these figures is clear: Tax-induced increases in cigarette prices are an effective tool to encourage reductions in smoking. The effectiveness of tax increases is particularly great in influencing young people to quit smoking or not to adopt the habit in the first place. Because the adult price elasticity is less than one, however, increases in taxation will also have the direct effect of increasing government revenues. Thus, the cigarette excise tax is a valuable tool for the promotion of health at the same time that it is a revenue generator. Through its impact on smoking by teenagers, it is a particularly attractive disease prevention measure.

To this point the focus has been on the federal tax, for two reasons: it is a timely issue and it is a tax that affects all smokers, regardless of their state of residence. As of mid-1985, state excise taxes ranged from a low of 2 cents in North Carolina to a high of 26 cents in Connecticut and Massachusetts, producing comparable differences in cigarette retail prices. While the mechanism for a state tax change influencing consumption and revenues is quite comparable, the effects are not uniform across states, reflecting different retail price "starting points" and the possibility of interstate bootlegging of cigarettes.[16,17] The working group's recommendation regarding excise taxation includes the proposal that states increase their individual excise taxes, particularly those states now having relatively low taxes. In the remainder of this section, however, issues are discussed solely in the context of the federal excise tax, although many points will apply equally to state taxes.

If excise taxation is so attractive from both a public health and fiscal standpoint, one might wonder why the federal government has adopted a policy that resulted in only one increase in its tax rate in over 30 years, with that increase defined as a temporary matter of fiscal exigency. One plausible reason is the obvious political one: the industry, its effective Washington lobby, and its influential congressional support have succeeded in blocking attempts to raise the tax. The temporary nature of the 1983 doubling of the tax in the TEFRA legislation reflected a compromise position with the southern congressional voting bloc. Similarly, the influence of tobacco interests resulted in the decision to let the tax's 1985 sunset provision stand in a 1984 budget bill that otherwise provided for increased revenues and decreased spending.

At the same time, increasing the excise tax raises several legitimate questions. First and foremost among these is the concern that cigarette excise taxation is regressive, that its burden is felt most keenly by the poor. As Harris[18] points out, however, the nation's very poorest groups have lower smoking rates than middle income groups. It is also the case that many of the poor are teenagers and young adults whose poverty is temporary, a reflection on their age rather than a permanent socioeconomic condition. Harris notes that such people may have the most to gain in terms of the health consequences of avoiding smoking. As the above discussion indicates, it is precisely this group for whom the price elasticity of demand is the greatest. The teenage price elasticity estimate of −1.4 implies the possibility of a progressive distribution of the burden of the tax for this group.

A recent study lends further insight into this situation. Examining smokers' price responsiveness in Great Britain, Townsend[19] demonstrated that price elasticity of demand for cigarettes was a function of socioeconomic status. While previous estimates of price elasticity have been based on entire national or state populations, Townsend broke the aggregate elasticity measure into rates specific to socioeconomic groups. She found that the lowest socioeconomic classes were the most price-responsive smokers, a logical result of having the greatest income effects of a price change. Townsend's research indicated that while the overall elasticity for Great Britain suggested slight regressiveness from the cigarette tax, the association of socioeconomic status and elasticity made the burden of a tax increase progressive. Put simply, the lower classes quit smoking in sufficiently large numbers in response to price increases that the group's collective share of the tax burden fell. This might not hold in the United States, but a qualitatively similar phenomenon, which would be expected, implies less regressivity than is suggested by the overall elasticity figure.

Regardless of these qualifications, the overall distribution of the excise tax burden is regressive. The belief that the tax system should be progressive on balance does not require, however, that all components be progressive. A regressive tax like the cigarette excise can be balanced by increasing progressivity in the rest of the system, or perhaps more importantly, by relating it to increases in or maintenance of benefits directed toward lower income groups. The important point is that the tax will induce some smokers to quit, others to move one step closer to eventually quitting, and potential smokers to refrain from taking up the habit, bene-

fiting each of these groups economically, as well as improving their health.

Another concern relating to the federal excise tax is that it will lead to decreases in state excise tax revenues, the result of consumption falling while state tax rates remain unchanged. While this effect would result from any successful policy to reduce smoking, the specific concern could be addressed directly by having the federal government engage in revenue sharing, distributing a portion of its increased revenues to the states in accordance with their estimated losses. As indicated earlier, the state revenue losses amount to a small fraction of federal gains, so complete compensation is possible with federal revenues still advancing substantially. If federal compensation were tied to states' tax rates, this might constitute an additional incentive for states to consider increasing their tax rates.

The first policy recommendation calls for an increase in the nominal value of the federal excise tax that will restore the real value of the tax when it was last permanently raised in 1951. Because ensuing years of inflation necessarily will erode the real value of any nominal tax, the government is urged to tie the tax rate to inflation. An ad valorem tax is a fixed percentage of wholesale price; alternatively, the excise tax can be tied to a general index of consumer prices or an index of cigarette price. Such inflation-adjusted taxation will not increase the real value of the tax but at least it will assure that the tax will not be permitted to fall annually simply as the result of inflation.

In offering this first recommendation, the working group notes that support for increasing the tax has come from such major health organizations as the American Medical Association,[20] the American Public Health Association,[21] the American Association for Cancer Research,[22] the American College of Cardiology, the American Cancer Society, the American Heart Association, and the American Lung Association.[23]

Thus, the following is the recommendation of the working group:

> *The federal cigarette excise tax rate should be raised to 32 cents per pack and in future years be indexed to inflation. State legislatures should be encouraged to raise cigarette excise tax rates, particularly those states in which rates are currently below the national or regional norm. States should also be encouraged to consider indexing taxation of cigarettes to inflation.*

Tobacco Promotion

Cigarettes are currently the nation's most heavily advertised consumer product. In 1983 the industry devoted close to $2 billion to promoting the product (communication with Judith Wilkenfeld, Program Advisor, Cigarette Advertising and Testing, Federal Trade Commission),[24] roughly $8 for every man, woman, and child, smoker and nonsmoker alike, or almost $40 for every smoker.

Excluded from access to the nation's airwaves by the Public Health Cigarette Smoking Act of 1970, cigarette advertisers rapidly came to dominate the print media. In 1980 cigarette ads accounted for just under 15 percent of product advertising in newspapers, ten percent in magazines, and almost a third of all outdoor advertising. Over half of all revenues from newspaper supplements represented cigarette advertising and nearly one in every two billboards carried an advertisement for cigarettes.[25] In 1983 four of the six cigarette-manufacturing conglomerates ranked among the top ten magazine advertisers, with R.J. Reynolds and Philip Morris ranking number one and two, respectively. The same four also ranked among the top ten newspaper advertisers, with R.J. Reynolds again topping the list. In outdoor advertising, these four companies ranked numbers one through four.[26]

While conventional advertising is the principal technique employed to promote tobacco use, it is not the only one. Increasingly, the tobacco companies are relying on sponsorship of sports and cultural events, free or subsidized distribution of product samples, and "social issue" advertising campaigns to promote the image of their product. Through sponsorship of sporting and cultural events, ranging from soccer teams to symphony orchestras, from automobile races to traveling art exhibits, the industry attempts to create an aura of legitimacy and wholesomeness. It has been said that "They're gaining innocence by association."[27] Further, as is demonstrated in a highly acclaimed new book,[28] sponsorship serves to develop institutional dependencies on the tobacco industry.

Distribution of sample cigarettes and discount coupons serves a direct promotional purpose, particularly when the apparent target of the effort is young people. By contrast, the new "social issue" advertising has a multiplicity of purposes. Preeminent among these is the objective of encouraging the public to believe that there still is some question as to whether cigarettes cause illness. Illustrative is the recent R.J. Reynolds campaign calling for "an open debate," in which the company is the only side having the resources to present its side of the issue through purchasing advertising space in newspapers and magazines. The Reynolds advertisements include distorting and taking out of context findings from scientific studies, such as the misinterpretation of the results of the Multiple Risk Factor Intervention Trial to suggest that there is still a debate about whether smoking causes heart disease. The national Coalition on Smoking or Health has asked the Federal Trade Commission to take action against Reynolds to rectify what it believes to be willful misinterpretation to intentionally mislead the public.

Some of the social issue advertising appears to be intended, like sponsorship, to create an "aura of legitimacy, of wholesomeness." An obvious recent example is the Tobacco Institute's cooperation with the National Association of State Boards of Education in the production, publicizing, and distribution of a booklet entitled *Helping Youth Decide*, presented as "a public service."[29] Other social issue advertising attempts to diminish the health issue by emphasizing the social costs of decreases in smoking. A notable example is a

recent advertisement depicting three workers from the Bakery, Confectionary and Tobacco Workers International Union bemoaning the fact that tobacco workers' livelihoods are threatened by "well-meaning people" who oppose smoking. This advertisement, like the others, was financed by the Tobacco Institute. Critics have described it as exploitation of the labor movement and an insult to the public.[30, 31]

In the opinion of the working group, the implications of this massive promotional campaign clearly warrant the concern of the public and the attention of public policymakers. These implications can be categorized as direct and indirect impacts on the initiation and maintenance of smoking habits.

Advocates of restrictions on advertising contend that advertising and other promotional techniques directly encourage smoking, both initiation and maintenance of the habit. By portraying smoking as a purely pleasurable activity associated with success — social, sexual, and athletic — advertisements attempt to recruit youngsters into the smoking population, it is claimed, and support the continuation of smoking by potential quitters.[32] Similarly, the health message advertisements, such as those promoting low tar and nicotine cigarettes, attempt to reduce the smoker's anxiety, converting the question of whether to smoke into the less threatening decision of whether to switch to an ostensibly less hazardous brand.

The industry has consistently denied that advertising encourages smoking, claiming that advertising serves merely to influence brand selection among existing smokers. Proponents of this view cite several econometric studies that appear to lend support.[33–35] As discussed below, however, these studies are not designed to adequately address the basic issue; the evidence that exists is mixed and, frankly, not convincing in either direction.

The indirect impacts of tobacco promotion are numerous, diverse, subtle, and possibly more pernicious. The principal impacts are the influence of cigarette advertising revenues on the media's coverage of smoking and health issues and the more diffuse effects of institutional dependence on tobacco as a benefactor. Each of these has implications for how Americans understand and interpret the smoking-illness connection; ultimately, this translates into behavioral consequences that themselves have health implications. Specifically, it can be argued that dependence on tobacco advertising revenues has caused editors and publishers to avoid articles on smoking and health when possible and to tone them down when not. This in turn has translated into a lower level of understanding of the health consequences of smoking than would have existed had media coverage been determined solely by the inherent interest and importance of the subject. This lower level of understanding can be associated with higher rates of smoking than would have occurred in an environment of full information and discussion.[28, 36]

The evidence for this contention is abundant, if largely anecdotal. To date, there are only a handful of empirical studies that address the relationship between advertising revenues and media coverage.[37–39] In a study of coverage of smoking and health in women's magazines, Whelan and colleagues[37] found only eight feature articles in more than a decade in ten prominent magazines that accept cigarette advertising. In contrast, *Good Housekeeping* and *Seventeen*, magazines that do not accept cigarette advertisements, carried 11 and five such articles, respectively. *Good Housekeeping* alone offered its readers more articles on the subject than the total of the ten other magazines.

Whelan's organization, the American Council on Science and Health, has also compared coverage of smoking and health and cigarette advertising revenues in a broader study of nationally prominent magazines.[38] Of the magazines that carried at least 60 health-related articles during the period studied (1965–1981), only four devoted as many as one out of ten to smoking. Of these four, the top three — *Reader's Digest*, *Good Housekeeping*, and *Prevention* — do not accept cigarette advertising. The proportion of health articles that dealt with smoking in those magazines was 34.4 percent, 22.1 percent, and 15.4 percent, respectively. Of the magazines that accept tobacco advertising, the only magazine to devote more than one of ten health articles to smoking (11.7 percent) was *Vogue*; at 5.1 percent of total revenues, its cigarette advertisement share of advertising income was the lowest of the remaining magazines. The percentage of advertising revenues from cigarettes in other magazines ranged from 7.1 percent to 17.2 percent, with the percentage of health articles discussing smoking varying from 7.4 percent to none (*Ms.* and *Redbook*). There was no substantial correlation between the volume of advertisements and smoking coverage within this group of magazines, but the contrast between the magazines that accept cigarette advertisements and those that do not was striking.

Magazines have reported losing their tobacco advertising following the publication of articles on smoking[37]; a newspaper writer was fired for alluding to the health hazards of smoking in a preview of a Kool Jazz festival[27]; health writers have reported being censored on the subject of smoking, ranging from being told not to write about it altogether, having material on smoking moved from the front to the end of an article, and being paid for an article that was not published because it focused on smoking and "the magazine is running three full-page, color ads [for tobacco] this month"[27, 37, 38]; smoking cessation advertisements have been turned down by magazines simply because they were "anti-smoking"[36]; a major advertising agency was asked by a tobacco company client to drop the agency's account with a magazine that frequently published articles on the health hazards of smoking[40]; and a major national newsweekly purportedly deleted text on the hazards of smoking from a health care supplement without the knowledge of the medical association that contributed to production of the supplement.[36] Other examples and examination of the problem have been discussed by numerous authors since the 1930s.[36, 41–45]

That information on and discussion of smoking are restricted is suggested by the surprising superficiality of the public's understanding of the health hazards of smoking. Recent polls suggest that large proportions of the U.S. population do not understand that smoking reduces one's life expectancy; large proportions do not identify smoking as the principal cause of lung cancer (it is responsible for an estimated 80 percent to 90 percent[22, 46]) and do not perceive lung cancer to be a fatal disease; large proportions do not identify smoking as a cause of heart attacks (it is responsible for an estimated 25 percent of coronary heart disease[47]).[6] Recent developments associated with smoking and health remain largely unknown to the general public. For example, lung cancer has overtaken breast cancer as the leading cause of cancer death in women; and were it not for smoking related cancers, the age-adjusted cancer death rates of both men and women would actually be falling.[22, 46]

If the basic facts of smoking and health remain unfamiliar to so many Americans, it seems inevitable that new and subtle smoking-illness relationships are poorly understood at best. For example, few smokers of low tar and nicotine cigarettes seem aware that the smoke they inhale includes hundreds of additives, some of which are known or suspected carcinogens. Further, research indicates that many, if not most, of such smokers compensate for the reduced nicotine delivery of their cigarettes in a variety of ways, collectively referred to as nicotine regulation, that effectively increase the yield of harmful substances. This may result in inhalation of toxic substances in cigarette smoke at levels close to those of the smoker of regular cigarettes.[48-53]

A probable consequence of low-tar smokers' ignorance of nicotine regulation is that many people are smoking today, who would not be otherwise, due to the erroneous belief that their smoking habits are "safe." Similarly, the superficial general appreciation of the basic facts of smoking and health must be contributing to maintenance of a larger smoking population than would be sustained if understanding were more profound and widespread. The result is a larger burden of smoking-related illness and death than would exist in an environment in which the public was better informed. In summary, massive cigarette advertising reduces media coverage of smoking and health, which in turn contributes to a greater prevalence of smoking and of smoking-related disease.

The profundity of this coverage issue may be greater still because cigarette company advertising dollars extend to a wide variety of everyday consumer products produced by the cigarette-producing conglomerates.[28, 54] Editors and owners might fear that a news or editorial discussion of smoking would be perceived as an attack on their most important sponsors. It has been reported, for example, that the *Saturday Evening Post* was threatened with loss of nontobacco advertising because the magazine persisted in covering the topic of smoking and health.[55] This problem may grow in the future as the cigarette producers diversify further. A recent example is the merger of R.J. Reynolds and Nabisco, a marriage that creates a company that, by itself, will spend well in excess of $1 billion in advertising. Still more recently, Philip Morris acquired General Foods, creating a similar situation.

The extent and importance of the censorship issue is not well understood. Nevertheless, the anecdotal and limited empirical evidence is sufficient to raise substantial concern. More objective empirical research is needed, but the documented problem suggests that this indirect influence on smoking behavior may be quite substantial and warrants policy attention.

The case for policy attention is bolstered when the coverage issue is considered with the question of the direct impact of advertising on smoking behavior. Most econometric evidence does not support the conventional wisdom within the smoking-and-health community that advertising directly induces nonsmokers to become smokers, or smokers to continue their habits. To the contrary, the bulk of the evidence finds little association between changes in the aggregate level of advertising and changes in the prevalence or intensity of smoking.[33-35] One recent econometric study, however, did find a statistically significant relationship between aggregate cigarette sales and advertising in Germany.[56] Nevertheless, the bulk of the literature has been misinterpreted. While the findings have been read as indicating that advertising does not influence the level of cigarette consumption, the only conclusion one can safely draw from a regression analysis is that *marginal* changes in the level of advertising do not affect cigarette consumption *on the margin*. As policy debates on cigarette advertising have never focused on the issue of the marginal impact of additional advertising, the body of empirical literature on the phenomenon is of limited utility in this situation. At maximum, one can conclude that tinkering with the levels of cigarette advertising is unlikely to have a significant impact on smoking.[57] In Norway, however, rapid growth in tobacco consumption ceased immediately following a ban on advertising, and a pattern of gradually declining consumption set in thereafter.[58]

The conventional wisdom derives in large part from a widely held belief, inside and outside of the advertising profession, that advertising is intended to expand the market for the general product and not simply redistribute shares of a fixed demand.[59] Economic analysis of this question produces divergent results, with a cluster of studies concluding that the market share function is the most important in a mature industry,[33] though professional advertising organizations acknowledge that expansion characterizes the goal of virtually all industries, including those that are mature.[60] Analysis of cigarette advertising shows advertising trends that lead changes in smoking behavior, at least once the behavior is initiated. Two recent examples are advertising for, and then consumption of, low tar and nicotine cigarettes and advertising directed toward, and then consumption by, women. One cannot say with certainty that the advertising campaigns caused the diffusion of these two new habits. To the

contrary, it can be argued that changes in social climate foster changes in advertising, at least initially. At minimum, however, advertising is used to exploit the changing social climate and to maximize its sales potential. Women may not have started smoking because of advertising targeted at them, but the cigarette companies have marketed female oriented products aggressively to build the market as much as possible.

Perhaps the most compelling claim made by opponents of cigarette advertising is that it contributes to a social environment in which people are told that it is acceptable to smoke. In an earlier era, prior to the emergence of the new nonsmoking ethos, advertising contributed to the widespread perception that smoking was not only acceptable but that it was socially obligatory. Today the imagery of smoking in advertisements — the association with success, attractiveness, independence — contradicts the message about the health hazards of smoking, a message that is necessarily delivered much less frequently and less visibly due to the resource constraints of the interested organizations.

Conventional advertising combines with social issue advertising — tobacco companies' collaboration with and support of union workers, educational associations, and the like — to foster the image of cigarettes as a product unjustly maligned by well-meaning but misguided "do-gooders." Through all such channels the industry struggles to obfuscate the principal issue — that, according to the Surgeon General, cigarette smoking is "the most important public health issue of our time."[61] The existing evidence from a wide variety of surveys suggests that the industry has been quite successful in this regard. The superficiality of the public's knowledge of the health hazards of smoking is discussed above. The image that smoking really isn't all that important is strongly suggested in a recent poll in which the public ranked "Don't Smoke" as the tenth most important health and safety priority, behind such measures as having smoke detectors in the home. This occurred in spite of the fact that fires kill 6,000 people each year while at least 350,000 perish from smoking cigarettes. Furthermore, up to half of all home fires are started by cigarettes. In comparison with the lay public's understanding, health and safety experts ranked "Don't Smoke" the number one priority.[62]

Somewhat less tractable, but probably quite important, is the sense of social legitimacy and even prominence that the cigarette manufacturers have bought through advertising and sponsorship of valued cultural institutions — especially sports and the arts. Taylor[28] suggests that the dependency, and more broadly the acceptability, that this has fostered has served to protect the interests of the industry for more than 20 years.

Taken together, these considerations lead us to the conviction that tobacco advertising and other forms of promotion serve to perpetuate smoking in our society. Although heard with much less frequency, the smoking and health message has been sufficiently compelling to reverse the trend toward ever-increasing levels of cigarette consumption[63, 64]; however, the pro-smoking message, seen daily by virtually every American citizen, has slowed that reversal and delayed the transition of our society from the world's heaviest smokers to the nonsmoking society envisioned by the Surgeon General. The working group is convinced that a serious attempt by the public and private sectors to inform people about the truth about smoking, and to create an environment in which children are not seduced into starting to smoke, requires strong policy measures to reduce the impacts of tobacco promotion.

In the remainder of this section, a few of the many alternatives for dealing with the consequences of tobacco promotion will be explored. The working group emphasizes that the problem relates to all forms of *promotion*, and not simply its most prevalent form, advertising. Many observers have noted the manufacturers' industriousness in finding ways of getting their message to the public even where advertising is not permitted.[28] When broadcast advertising was prohibited in our own country, cigarette advertising rapidly came to dominate the print media,[25] and while formal advertising is not permitted on television, it is not uncommon to see cigarette logos repeatedly during the coverage of major professional sports events. For example, large Marlboro billboards have been placed strategically in the camera's eye every time a field goal or extra point is kicked in a football game in many stadiums and every time a home run is hit to center field in baseball on many fields. In England, tennis enthusiasts watching Martina Navratilova on televised matches have been exposed throughout the match to her tennis outfit designed with the colors and logo of a popular British cigarette oriented toward females. One observer has noted that cigarette logos are now seen in nonadvertising scenes on British and Australian television during many hours of air time.[32] In the United States, Virginia Slims receives ample air time during the televising of Virginia Slims-sponsored tennis.

Beyond television, and beyond conventional print media advertising, the industry has developed several relatively new modes of promoting cigarettes. These range from the previously mentioned sponsorship activities, some of which prominently display the sponsor's logo (e.g., the sports events), to getting the product's logo into movies. In the movie "Superman II," for example, the Marlboro logo showed up over a dozen times, a phenomenon that has been explained as merely coincidental by the interested parties.[27]

Taylor's book[28] documents both the nature and extent of the rapid growth in nonadvertising promotion of cigarettes. Data presented by Hutchings[25] also indicate the rapidity of this growth. From the beginning to the end of the decade of the 1970s, while media advertising expenditures increased by one and a half times, other tobacco company promotional expenditures grew by factors of 4 (promotional allowances), 6 (sampling), 11 (coupons and other promotions), and 22 (sponsored events). While in 1970 nonadvertising promotional expenditures constituted only 15 percent of total promotional expenditures, by 1979 the share of nonadvertising expenditures had grown to 27 percent. And, in the four years from 1979 to 1983, this figure

grew to a third of all promotional expenditures.[24] Thus, it is not enough to address the problem of conventional advertising in order to deal with the consequences of cigarette promotion. Furthermore, as the recent campaign promoting Skoal Bandits vividly demonstrated, the tobacco industry as a whole can counter opposition to cigarettes by developing and promoting other tobacco products. This explains the working group's conviction that any policy must be concerned with all forms of tobacco use and all forms of promotion.

The most obvious and direct approach to the problem is an outright ban on all promotion of all tobacco products. Even a complete ban would not address some of the problems discussed above, as sponsorship of cultural events might remain possible, perhaps subject to restrictions on publicizing tobacco company sponsorship. But banning all forms of promotion would prevent the "balloon squeezing" phenomenon that accompanies so much of government regulation: a restriction placed in one area causes a related outcome to pop out elsewhere. Here, for example, if only advertising were banned, it is almost certain that highly visible sponsorships of sports teams and events would proliferate. Similarly, if restrictions were placed only on cigarette promotion, it would be expected that heavy promotion of other tobacco products, such as smokeless tobacco, would follow. Even so, the aggregate impact of promotion might be decreased if the most important forms were effectively restricted.

The notion of a ban is not without precedent — 21 countries have banned cigarette advertising[32, 65] and in our own country cigarette advertising has been banned from the broadcast media for a decade and a half — but the idea of banning all forms of promotion of all forms of tobacco products has not been adopted elsewhere to date. Recently, the National Advisory Council on Drug Abuse moved in this direction by calling for legislation prohibiting all advertising and other forms of promotion of cigarettes.[66] Other health organizations have also adopted policies in support of advertising bans. These include the American Lung Association, the American Medical Association, the American Academy of Family Physicians, the American College of Emergency Physicians, the British Medical Association, the Canadian Medical Association, and the World Health Organization.

The U. S. broadcast advertising ban of 1971 is instructive because it represents an instance in which cigarette manufacturers worked quietly to encourage the ban. Their logic was that antismoking messages, donated by broadcasters in compliance with the Federal Communication Commission's Fairness Doctrine, were more effective in deterring cigarette consumption than the pro-smoking advertisements were in encouraging it.[67] A wealth of empirical studies since then supports this view, leading one observer to label the advertising ban a Pyrrhic victory for the smoking-and-health community.[35]

The notion of a ban on promotion of a legally available product raises ethical as well as legal issues. We concur that the principle of free speech deserves the widest and broadest protection, but we note the following qualifications that apply in this particular instance: First, the issue of *commercial* free speech is different from the more general issue of political, religious, and other similar free speech.[68] Second, free speech for tobacco advertisers appears to translate into restricted speech for the recipients of tobacco advertising expenditures: as we discussed above, editors and publishers apparently feel constrained to limit discussion of the hazards of smoking out of fear that they will lose important cigarette advertising revenues. If the journalism profession could resolve this issue, the concern might diminish in importance. But the economics of tobacco advertising are so compelling that the universal voluntary elimination of the problem appears essentially unattainable. Third, while the tobacco industry might appeal to concerns about principles, it must be recalled that the industry supported the TV-radio advertising ban out of concern with bottom-line profitability.[67]

The fourth and final qualification is the quantitative and even qualitative uniqueness of the problem of cigarette smoking. A cigarette is the only significant consumer product that is harmful when used as intended. Furthermore, the magnitude of the harm associated with this product is unprecedented and has no parallels today. The mortality associated with smoking represents nearly a fifth of all American deaths, a figure that exceeds other major public health problems such as highway fatalities by a factor of more than seven. Even the most notoriously hazardous substances that are illegal, such as heroin, do not exact the death toll associated with America's most widespread addictive product, the cigarette.[69] Further, most smokers become addicted before they reach the age of legal accountability.

This last point underlies one of the strongest arguments in favor of a ban on promotion of tobacco products. We concur with what the cigarette manufacturers claim is their position: children should not smoke. A wide variety of evidence, and simple logic, indicate that the industry does not genuinely hold this position. Tobacco experimentation typically begins in the early teens, and the habit of regular cigarette smoking is usually established today by the mid-teens; rarely does smoking begin in adulthood. Further, it is the addictiveness of tobacco that sustains much of its use. Without children adopting smoking habits, smoking would be expected to diminish dramatically. Thus, it is essential for the survival of the industry that children be attracted to smoking, and it appears to be no accident that cigarette promotions typically portray role models the young aspire to emulate.

If advertising contributes to encouraging the initiation of smoking by children, then it certainly is performing a function the public does not desire; this is emphasized by the fact that the cigarette companies are so vehement in their protestations that they do not advertise to children. The appropriate question, then, is how society can assure that smoking is something engaged in only by the knowledgeable, consenting

adult. Discouraging the initiation of smoking in the impressionable teenage years is certainly essential. Eliminating the seductive imagery of cigarette advertising is, in our opinion, essential to discouraging initiation of smoking by teenagers. Experience in Scandinavia supports the potential of an advertising ban in this regard.[28, 58]

Eliminating the imagery of smoking advertisements can be achieved in several different ways. Prohibiting cigarette advertising would have this effect, at least in the print media. Restricting sponsorship of sports events might also dispel the association between smoking and athletics. Alternatively, restrictions could be placed on the content of cigarette advertisements. For example, advertising might be restricted to "tombstone advertising" in which no models, slogans, or scenes are permitted. Tombstone advertisements could be restricted to pictures of the cigarette packages (with no models or scenery permitted on the packs) or to the brand name, perhaps supplemented with prescribed data on tar, nicotine, and carbon monoxide, for example.

The Federal Trade Commission is charged with monitoring advertising for false or misleading claims, and tombstone advertising could be justified on the grounds that it is the only form of advertising that is not in violation of such standards. The advantage of restricting advertising to the tombstone mode is that the free-speech issue is mitigated, while the false and misleading imagery is avoided. The disadvantage is that the persistence of cigarette advertising as a major element of publications' revenues could continue to contribute to restricted discussion of the health hazards of smoking by the media.

In the same spirit of truth-in-advertising, the R.J. Reynolds "open debate" campaign could be interpreted for what it is: product promotion. In this capacity, all of the ads in the series could be required to bare the Surgeon General's health warning label. As a remedy to the misleading material the company has published, the Federal Trade Commission or the courts could require Reynolds to disclose in future advertisements that there is no genuine controversy on the hazards of smoking. Certainly Reynolds' attempt to create a public sense of controversy should serve as evidence for plaintiffs suing the company for smoking-related lung cancers and other diseases.

The information-transfer concern could be addressed by implementation of a requirement, analogous to the requirement that advertisements bear the Surgeon General's warning, that cigarette advertisers pay for an equivalent amount of space (or some fractional amount) to be used by organizations promoting understanding of the health consequences of smoking, such as the major voluntary associations and the federal Office on Smoking and Health. Such an "equal space" requirement would permit the public to receive some balance in its exposure to the virtues of tobacco products.

There are many other approaches to addressing the problems created by cigarette promotion, several of which are not mutually exclusive. Citizen groups could push cigarette companies to adhere to their own voluntary guide lines on advertising, which have included prohibition of advertising directed at children and avoidance of advertising "suggest(ing) that smoking is essential to social prominence, distinction, success, or sexual attraction."[6] Another promising approach, implemented effectively by DOC (Doctors Ought to Care), is to parody tobacco promotions. DOC has produced many antismoking posters parodying such cigarette advertising themes as sex appeal and has developed an Emphysema Slims Tennis Tournament to point out the absurdity of Virginia Slims' sponsorship of professional sport. Still another approach is for citizen groups, including medical groups, to mount boycotts of publications that accept cigarette advertising, cancelling subscriptions to those that do and informing them of the reason. Given the pervasiveness of cigarette advertising, full-scale boycotts would be unlikely to materialize, but selective boycotting, by physicians for example, might serve an important and influential symbolic function.

Boycotting could be extended to two other areas. The most obvious is a boycott of the products produced by one or more cigarette manufacturers, with the goal of encouraging the companies to cease advertising or modify their ads to comply with the previously mentioned guidelines. Given the diversity of products each of the cigarette-making conglomerates produces, it may be unrealistic to aim for a boycott of all of the products of all of the manufacturers. Rather, a boycott of a subset of prominent products of a single company might make sense, particularly since it could include boycotting the company's cigarette brands (i.e., smokers could be encouraged to switch to the brands of other companies).[70] Finally, sports fans could be urged to boycott sporting events sponsored by the cigarette companies.

The options for addressing the socially undesirable implications of tobacco promotion extend well beyond the few considered here. The working group believes that any policy recommendation must effectively restrict the ability of advertisements and other forms of promotion to entice youngsters into initiating tobacco habits. Furthermore, all alternatives should address the influence of advertising on the objective and open discussion of the hazards of smoking.

The following is the second recommendation of the working group:

Congress should prohibit advertising and other modes of promotion of all tobacco products. "Other modes" should include the sponsorship of sports and cultural activities and free distribution of cigarette samples. State and local governments should exercise their legal powers to prohibit the promotion of tobacco products within their jurisdictions, including prohibiting the free distribution of cigarette samples in public areas. Citizen groups and the major professional and voluntary associations should develop aggres-

sive and creative means of countering the imagery of tobacco advertising.

Nonsmokers' Rights

The past few years have witnessed an unprecedented spread of nonsmokers' rights laws, or clean indoor air laws, at the state and local government level. While such laws vary in their specific provisions and methods of enforcement, all share the objective of assuring the nonsmoker the right to breathe air unpolluted by cigarette smoke.

Nonsmokers' rights legislation is a phenomenon primarily of the past decade. In 1971 only five states had public smoking restriction laws, and these tended not to be highly restrictive, applying, for example, only to smoking in elevators. By 1978, however, 36 states had such legislation. The restrictiveness of the laws increased over the years, with Minnesota's 1975 rigorous but reasonable law serving as the standard.[71]

In the early- to mid-1980s, the momentum of the nonsmokers' rights movement shifted from state legislatures to the local level. San Francisco's successful passage of Proposition P in 1983 in the face of substantial industry-funded opposition prompted dozens of other communities to pursue legislation of their own. In the year following San Francisco's new law, for example, highly restrictive laws were put into effect in several other cities including Los Angeles, San Diego, and Fort Collins, Colorado. All of these laws included restrictions on smoking in the workplace, a strong provision that had had very limited success prior to the San Francisco victory.

Clean indoor air laws stand as testimony to the profound social change that has occurred in the attitudes of Americans toward smoking. Smoking has moved from a majority behavior among adult men to a habit of a minority of both men and women. At the same time, attitudes toward smoking clearly have altered toward making nonsmoking the social norm. Polls consistently show majorities of both nonsmokers and smokers favoring restrictions on smoking in public places.[72, 73]

The reasons for this transition are numerous and complex. Probably the major factor to date has been a growing sense among nonsmokers that they deserve freedom from the annoyance of smoke-polluted air. A significant and relatively new ingredient in the transition has been research indicating that inhalation of environmental smoke by the nonsmoker may create a health hazard, an issue initially brought to the public's attention in 1971 by then-Surgeon General Jesse Steinfeld. Patients with symptomatic coronary artery disease and obstructive lung disease have experienced exacerbation of symptoms upon involuntarily inhaling cigarette smoke.[74] In 1980 a study by White and Froeb[75] showed small-airways dysfunction in the lungs of nonsmokers working in smoky conditions. These workers' lung function tests yielded results comparable to those of light smokers of cigarettes. Independent research in France has produced similar findings.[76]

A growing body of literature has indicted passive smoking (also called second-hand smoking and involuntary smoking) as a risk factor in a wide variety of diseases and conditions. Best established of these are the effects of smoke on the fetus, a major concern of the Surgeon General's 1980 report, *The Health Consequences of Smoking for Women*.[77] Mothers who smoke during pregnancy also subject their children to the risk of long-term adverse effects on physical growth and development of cognitive skills.[77] Further, the children of smokers have been shown to suffer more respiratory illness than the children of nonsmokers, with the extent of the problem positively associated with the number of smokers in the family.[78, 79] Several studies have indicated a statistically significantly increased risk of lung cancer in the nonsmoking wives of smoking husbands.[80-83] Furthermore, the relative risk of lung cancer increased with the extent of the husbands' habits. Conversely, a study based on data from an American Cancer Society (ACS) survey did not find evidence of a passive smoking effect in lung cancer,[84] and the Tobacco Institute and its member companies have emphasized that apparent discrepancy in full-page newspaper and magazine ads. Since publication of the ACS study, however, an independent reanalysis of the data, which added estimates of workplace exposure to passive smoking, calculated relative risks of lung cancer associated with passive smoking consistent with the elevated risks reported in the other studies.[85] And a new case-control study directed by the author of the earlier ACS study produced results also indicating a significantly elevated risk.[86] Recently, Repace and Lowrey[87] concluded that passive smoking accounted for between 500 and 5,000 cases of lung cancer per year in the United States, making ambient smoke the most important environmental pollutant contributing to lung cancer.

Perhaps the most obvious hazard from other people's smoking is cigarette ignited fires. According to the United States Fire Administration, cigarettes caused 65,000 fires in 1981 and killed over 2,300 men, women and children, while burning 5,000 others. One study of fire fatalities found almost half to have been caused by cigarette-ignited fires.[87]

The effects of passive smoking will be a frontier for smoking and health research through this decade and into the next. The topic has already been addressed in over 800 publications.[88] As the evidence concerning the dangers of environmental tobacco smoke continues to mount, public support for clean indoor air laws will grow rapidly in numbers of persons and in intensity of effort. One might expect to find smoking relegated to consenting adults in the privacy of their homes.

The essence of the nonsmokers' rights movement, however, is a respect for the primacy of the nonsmokers' right to clean air over the smokers' right to pollute the air, independent of the health effects of passive smoking. As the number of nonsmokers continues to grow, and smokers become an increasingly smaller minority, demands for protection from unwanted smoke are almost certain to grow as well.

The working group supports the diffusion of clean indoor air laws, and the extension of them to public

places and work places where current laws do not now provide such protection. Nonsmokers' rights laws serve directly to protect the nonsmoker and indirectly to reinforce the growing nonsmoking ethos in our society. Consequently, the working group offers the third recommendation:

Legislators at all levels of government should be urged to enact clean indoor air laws that recognize the primacy of the right of the nonsmoker to breathe air unpolluted by tobacco smoke. Such laws should cover all public places and work places, with special emphasis being placed on health care institutions, schools, government offices, food sales and service establishments, and work sites. In recognition of the rights of smokers, such laws should provide for the availability of smoking areas so long as these do not inhibit the nonsmoker's use of the facilities in question. In addition to laws, public and private sector managers should be encouraged to establish clean indoor air policies within their facilities. Beginning with the Public Health Service of the Department of Health and Human Services, the federal government should promulgate strong clean indoor air policies within all its facilities.

Transition of Tobacco Farmers to Other Crops and Careers

Tobacco is big business in the United States. In 1983 consumers spent close to $30 billion on tobacco products, 93 percent of which was devoted to cigarettes. Governments shared almost $9.3 billion in excise taxes on these products, with the federal government claiming $4.75 billion and state and local governments an additional $4.52 billion.[89] According to estimates produced for the Tobacco Institute, tobacco generated close to $60 billion in economic activity in 1979, including both its direct and indirect effects. Thus tobacco was responsible for some 2 million jobs. These jobs are spread throughout the country, ranging from the tobacco farm to the local retailer.[90] While tobacco is grown in 21 states, only six southern states have substantial tobacco farming, and two thirds of the nation's tobacco acreage is in North Carolina and Kentucky.

The big business aspect of tobacco occurs during the processing of tobacco and other raw materials into consumer products, primarily cigarettes. In this arena the tobacco industry is highly concentrated, with only six companies accounting for virtually all of the final products. Each of the companies is a conglomerate, a development that has evolved over the past two decades when it was recognized that the future of tobacco was limited and uncertain.[91] Still, sales of cigarettes are highly profitable, typically constituting a much greater share of the companies' profits than of gross revenues. In one firm, for example, cigarettes accounted for half the gross revenues, but due to their high profit margins, produced close to 80 percent of the net profit.

The power of the tobacco lobby in Washington, a widely acknowledged phenomenon, has derived primarily from the concentration of powerful interests. These are the manufacturers themselves, tobacco allotment holders, and the representation of tobacco interests in Congress, where the delegations of the six-state tobacco bloc wield great power and influence over federal legislation. But while the power derives from these concentrated interests, the building blocks — the base — of the power is the community of farmers working on some 200,000 farms. In appeals to legislators, the industry commonly rests arguments for its positions on a purported concern about the dire implications of reductions in Americans' use of tobacco products for tens of thousands of small farmers.

Because a retrenchment in tobacco consumption does have implications for these farmers, the working group believes that it is appropriate that the federal and relevant state governments devote attention to means of easing the farmers' transition from tobacco growing to cultivation of other crops or to nonfarm activities. Nevertheless, the working group feels that certain facts deserve emphasis before further considering possible policy intervention. All of these relate to the transition that is already occurring and is the inevitable result of any decline in consumer demand for a product.

Both the number of tobacco farms and the number of farmers have decreased in recent years, owing to the expansion and mechanization of remaining farms and to the decreased demand for domestic tobacco. The latter has resulted in part from the nation's tobacco price support system, which is effectively pricing domestic tobacco out of the world market. The U.S. share of world tobacco production has fallen from 25 percent in the early 1960s to 11 percent in 1983. In the late 1950s, U.S. tobacco accounted for better than a third of all tobacco exports; our share remained over a quarter as recently as 1974. In 1983, however, the U.S. share had fallen to 17 percent. For the tobaccos for which the United States is best known — flue-cured and burley — the U.S. export share has fallen from 60 percent of the world market in the late 1950s to less than a fourth in 1983. Perhaps most striking is the fact that the percentage of imported tobacco in U.S. cigarettes has grown from 15 percent to almost a third in only a decade. Thus, although the companies appeal to concern for the welfare of American farmers, they increasingly buy their tobacco from foreign farmers.

A second factor in the reduction of demand for tobacco is the reduced amount of tobacco used in each cigarette. Modern cigarettes include filters, reduced cigarette circumferences, sheet tobacco and stems, and puffed tobacco (tobacco expanded such that a given weight fills a larger volume). In part, this transition reflects the switch to lower tar and nicotine cigarettes. Currently, roughly 1.7 pounds of tobacco are used in the manufacturing of every 1,000 cigarettes; by contrast, in the early 1950s, 2.7 pounds went into every 1,000 cigarettes. The result is that the adult per capita consumption of cigarette tobacco has fallen from over ten pounds in the early 1950s to six pounds today, a

decline of 40 percent. During the same period, the per capita consumption of cigarettes has fallen only ten percent.* With cigarettes constituting by far the dominant share of the tobacco products market today, these figures mean that Americans are now using less tobacco per capita than at any time in the preceding century.

Taken together, such changes have led to marked declines in the amount of tobacco farming in the United States. Total tobacco acreage peaked at almost 1.8 million acres in the early 1950s. A 1983 estimate placed the figure at under 800,000 acres, a decline of more than 50 percent. Total tobacco production declined much less, given increases in the yield per acre. Nevertheless, 1983 production has been estimated at only 60 percent of peak production.[92]†

Figures such as these make it clear that a gradual transition has been occurring for some time and is likely to continue. Nevertheless, the problem of small farmers who are dependent on the once-lucrative tobacco crop derives in part from the federal policy of price supports dating from the 1930s. In 1982 Congress mandated that this system become financially self-supporting; to date, the edict has led to tobacco farmers accumulating massive debts to the federal government.

The allotment system, also developed in the 1930s, has created a constituency economically interested in the future of tobacco for artificial (i.e., not free-market) reasons. Thus, as demand for tobacco continues to decline and as the price support system becomes increasingly economically outmoded, it seems reasonable that the federal government and relevant state governments should develop programs to assist tobacco farmers in making the transition to alternative economic activities. The range of potential assistance efforts is enormous, from retraining programs to direct subsidies for planting different crops to buying back and retiring allotments. While the notion of assisting farmers has received much lip service over the past decade, the working group is aware of few efforts to design and evaluate programmatic alternatives. For this reason, the working group is reluctant to recommend specific efforts but, rather, offers the following policy recommendation:

Given its central role in establishing the unorthodox market conditions in tobacco farming, the federal government, through its Department of Agriculture, should develop and evaluate alternative methods of assisting tobacco farmers to shift to other crops or to nonfarm economic activity. Further, we recommend that the affected states, primarily the six major tobacco-producing states in the South, recognize the inevitability of the trend away from tobacco use and devote their efforts to investigating constructive methods to reduce the states', and their farmers', dependence on tobacco cultivation.

*Adult per capita consumption of cigarettes peaked at 4,345 in 1963, the year before the first Surgeon General's report. In 1983 per capita consumption stood at 3,494, or 20 percent below the peak level and the lowest level since 1949.

†This figure may be misleading, as the estimates for 1981 and 1982 ran 87 percent of peak production. Still, the annual figures exhibit a clear, if slow, downward trend.

Conclusion

The working group and the Subcommittee on Smoking of the American Heart Association believe that the preceding four policy recommendations can make a significant contribution to developing a social environment in which smoking is perceived as an unhealthy and socially aberrant behavior. These measures can speed progress toward the Surgeon General's goal of a smoke-free generation by the year 2000.

A unifying feature of these recommendations is that each addresses both prevention of the initiation of smoking habits and encouragement of cessation. The first three do so directly, the fourth, indirectly, by attending to the needs of tobacco farmers. Two of the recommendations — those concerning taxation and advertising — will have the most substantial impact on the younger members of society. Encouraging adult smokers to give up their smoking habits is an essential ingredient in any major smoking and health initiative, but ensuring that the next generation of adults never begins smoking must be the fundamental strategy underlying the goal of a smoke-free society. Toward that end, the working group urges that individuals and organizations in positions of influence implement these recommendations and convert this ambitious agenda into a reality.

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